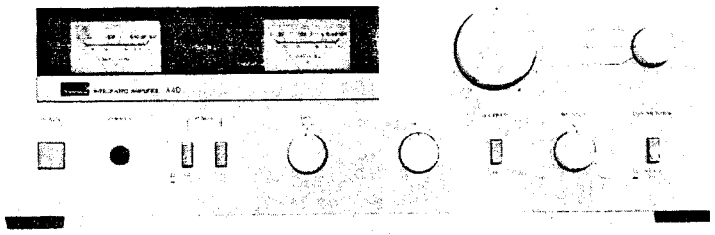
SERVICE MANUAL

INTEGRATED STEREO AMPLIFIER

SANSUI A-40



Sansui

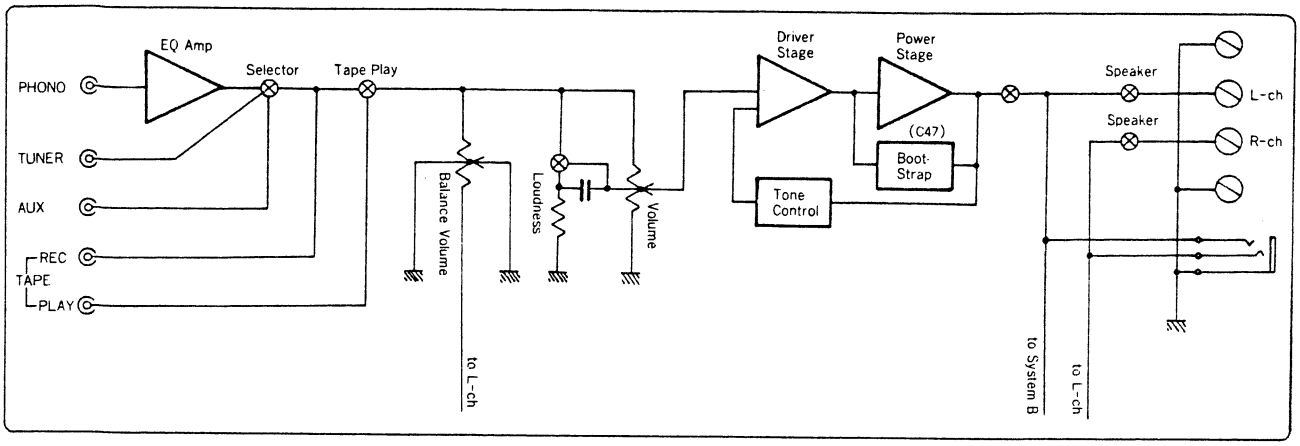
SANSUI ELECTRIC CO., LTD.

SPECIFICATIONS

Power output
Min. RMS, both channels driven, from 35 to 20,000 Hz, with no more than 0.09 % total harmonic distortion
25 watts per channel into 8 ohms
Load impedance . . . . 8 ohms
Total harmonic distortion
. . . . . less than 0.09 % at or below rated min. RMS power output
Frequency response (at 1 watt)
. . . . . 10 to 50,000 Hz
+0.5 dB, −2 dB
RIAA curve deviation (PHONO, 30 Hz to 15 kHz)
. . . . . +1 dB, −1 dB
Input sensitivity and impedance (1 kHz, for rated power output)
PHONO . . . . . 2.5 mV/47 kilohms
(Max. input capability; 150 mV at 1 kHz, less than 0.1 % total harmonic distortion)
TAPE/AUX, TUNER, TAPE PLAY, 150 mV/47 kilohms
Output level and impedance (1,000 Hz)
TAPE REC . . . . . 150 mV/47 kilohms
Hum and noise (short-circuit, A-network)
PHONO . . . . . 73 dB
TAPE/AUX, TUNER, TAPE PLAY
. . . . . 90 dB
Power requirements
Power voltage . . . . 110 ~ 120, 220 ~ 240 V (50/60 Hz)
For U.S.A. & Canada
. . . . . 120 V (60 Hz)
Power consumption
Rated consumption
. . . . . 105 watts
Dimensions . . . . . 430 mm (16-15/16") W
147 mm (5-13/16") H
251 mm (9-15/16") D
Weight . . . . . 5.1 kg (11.2 lbs) net
6.0 kg (13.2 lbs) packed

* Design and specifications subject to changes without notice for improvements.
* In order to simplify the explanation illustration may sometimes differ from the originals.

1. BLOCK DIAGRAM



2. ADJUSTMENTS (See Top View on Page 3)

Notes: 1. Room Temperature . . . . . 18°C ~ 28°C (65°F ~ 83°F)

2. For this adjustment, run the unit for more than 5 minutes after the power is switched ON with its level volume minimum.

2-1. Bias Current Adjustment

Note: Before adjusting or confirming the bias current, avoid such a measurement that the power transistors are heated.

STEP	SUBJECT	MEASURE OUTPUT	ADJUST	ADJUST FOR	REMARK
1.	Bias Current (L-CH) Adj.	Voltage between emitters of TR17 and TR19	VR01 on F-3124	DC 4 mV	Before turning ON power switch, turn VR01, VR02 fully counterclockwise.
2.	Bias Current (R-CH) Adj.	Voltage between emitters of TR18 and TR20	VR02 on F-3124	• 2,5 mV	In this adjustment, the bias current is converted into the voltage.

3. PARTS LOCATION & PARTS LIST

• Since some of capacitors and resistors are omitted from parts lists in this Service Manual, refer to the common parts list for capacitors & resistors which was appended previously to each Sansui Manual.

3-1. F-3124 Main Circuit Board (Stock No. 75725801)

Parts List

Parts No.	Stock No.	Description	Position
•Transistor			
TR01, 02	03010900, 1	2SA992 F, E	4A
TR03, 04	03067400, 1	2SC1845 F, E	4A
TR05, 06	03603700, 1	2SA798 F, G	2, 3C
TR09, 10	03064001, 2	2SC1904 B, V	1, 3B
TR11, 12	03067400, 1	2SC1845 F, E	2B
TR13, 14	03086101, 2	2SD357 D, E	2B
TR15, 16	03033301, 2	2SB527 D, E	2, 3B
TR17, 18	03070300, 1	2SC~~1837~~ 2901	2, 3B
TR19, 20	03013400, 1	2SC~~760~~ 0201	2, 3B
TR601	03085201, 2	2SD438 E, F	1B
TR602	03033601, 2	2SB560MP E, F	1C
•Diode			
D 601	03117000	RB-152	2A

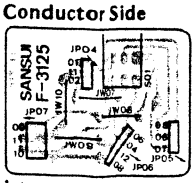
Parts No.	Stock No.	Description	Position
•Zener Diode			
ZD601, 602	03180000	RD22E B	1B, C
C 05, 06	08602500	150pF 50V C.T.	4A
C 07, 08	08602300	100pF 50V C.T.	4A
C 15, 16	08601700	33pF 50V C.T.	4A
C 21, 22	08602700	220pF 50V C.T.	4B
C 23, 24	08603000	390pF 50V C.T.	4C
C 29, 30	08602300	100pF 50V C.T.	2, 3C
C 33, 34	08602100	68pF 50V C.T.	1, 3B
C 35, 36	08600600	5pF 50V C.T.	1, 3B
C 41, 42	08601700	33pF 50V C.T.	2, 3B
C 45, 46	08601700	33pF 50V C.T.	1, 3B
C 603	08680400	10000pF 500V C.C.	2A
R 77, 78	00091700	0.33Ω x 2 5W Ce.R.	2, 3B

Parts No.	Stock No.	Description	Position
R 103, 104	00179000	10Ω 1W N.I.R.	2A
R 603, 604	00181800	2.7kΩ 1W	3A
VR01, 02	10370400	Volume 1kΩ B Bias adj	1B
VR601	10054600	Balance Volume 250kΩ B	4C
VR602	10156200	Treble Volume 100kΩ (C) x 2	3C
VR603	10156200	Bass Volume 100kΩ (C) x 2	2C
S 601	11322400	Push Switch, Tape Monitor	4C
S 602	11322400	Push Switch, Loudness	3C
S 603	11322300	Push Switch, Speaker	1C
	22007100	Input Terminal (Tape)	
	22067200	Input Terminal (Phono)	
	22902400	Output Terminal (A system)	
	22902500	Output Terminal (B system)	

• The circuit boards, F-3125, F-3126, F-3128, F-3127, F-3129 & F-3109 are not supplied as the assembled, the individual parts on the circuit boards, however are provided for orders.

3-2. F-3125 Selector Circuit Board

Conductor Side

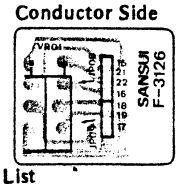


Parts List

Parts No.	Stock No.	Description
S 01	11907800	Rotary Switch, Selector

3-3. F-3126 Volume Circuit Board

Conductor Side

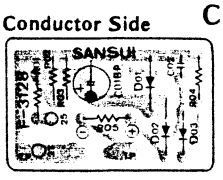


Parts List

Parts No.	Stock No.	Description
VR01	10155700	Volume 150kΩ (B) x 2

3-4 F-3128 Power Meter Drive Circuit Board

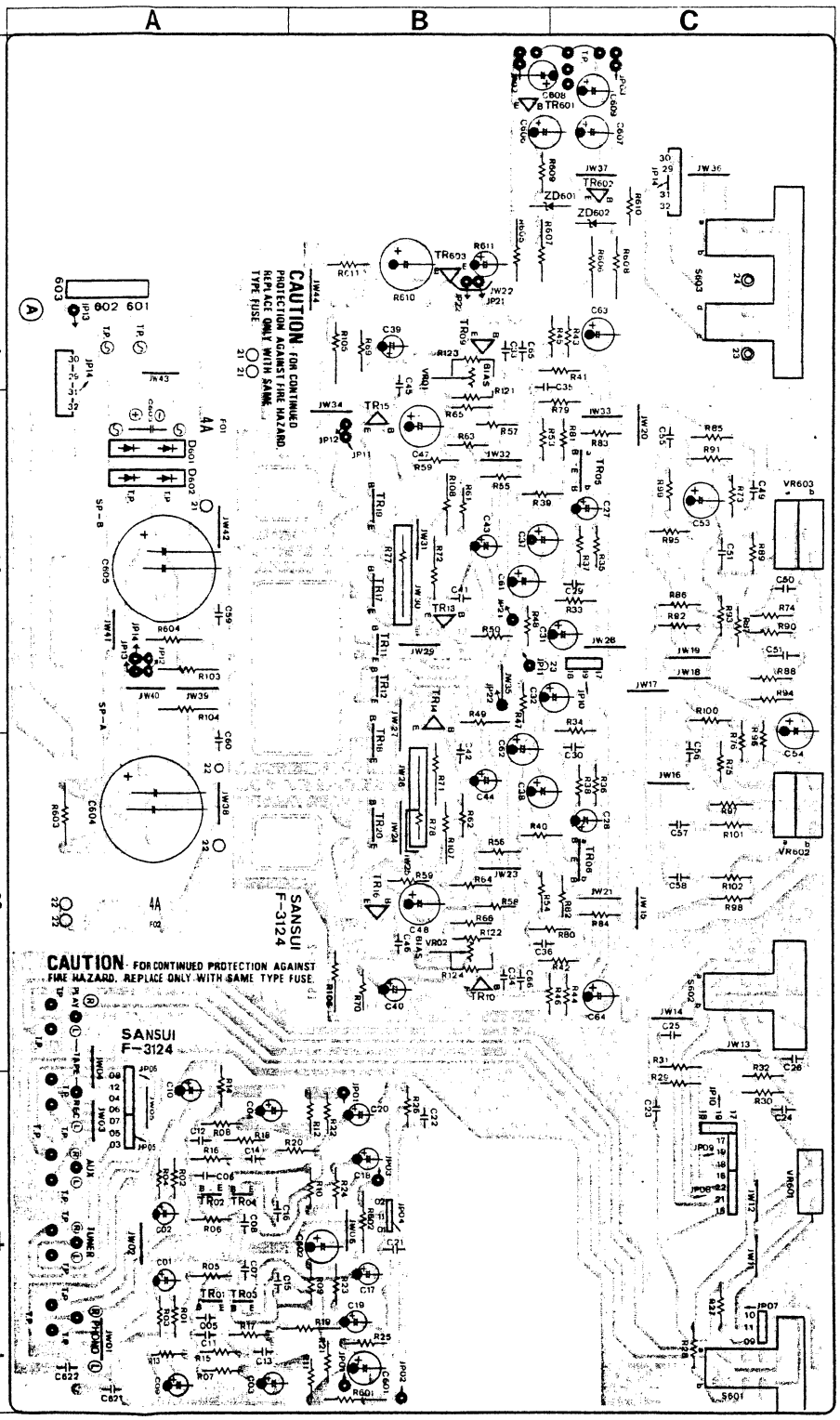
Conductor Side



Parts List

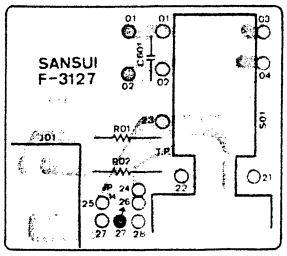
Parts No.	Stock No.	Description
•Diode		
D 01, 02	03117800	1N60
D 03	03117600	1S2473D

Conductor Side <F-3124 >



3-5. F-3127 Power Switch Circuit Board

Conductor Side

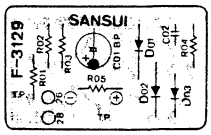


Parts List

Parts No.	Stock No.	Description
S 01	11317900	Push Switch, power
	24306000	Phone Jack

3-6. F-3129 Power Meter Drive Circuit Board

Conductor Side

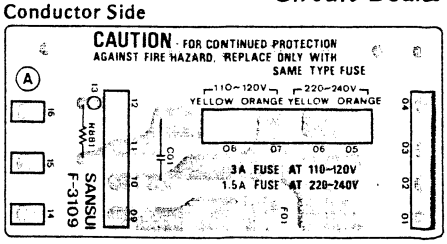


Parts List

Parts No.	Stock No.	Description
•Diode		
D 01, 02	03117800	1N60
D 03	03117600	1S2473D

3-7. F-3109 Voltage Selector Circuit Board

Conductor Side


CAUTION FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH SAME TYPE FUSE
110~120V
220~240V
YELLOW ORANGE YELLOW ORANGE
3A FUSE AT 110~120V
1.5A FUSE AT 220~240V
SANSUI F-3109

Parts List

Parts No.	Stock No.	Description
F 01	04322300	AC Fuse 1.5A /250V
	04322600	AC Fuse 3A /125V

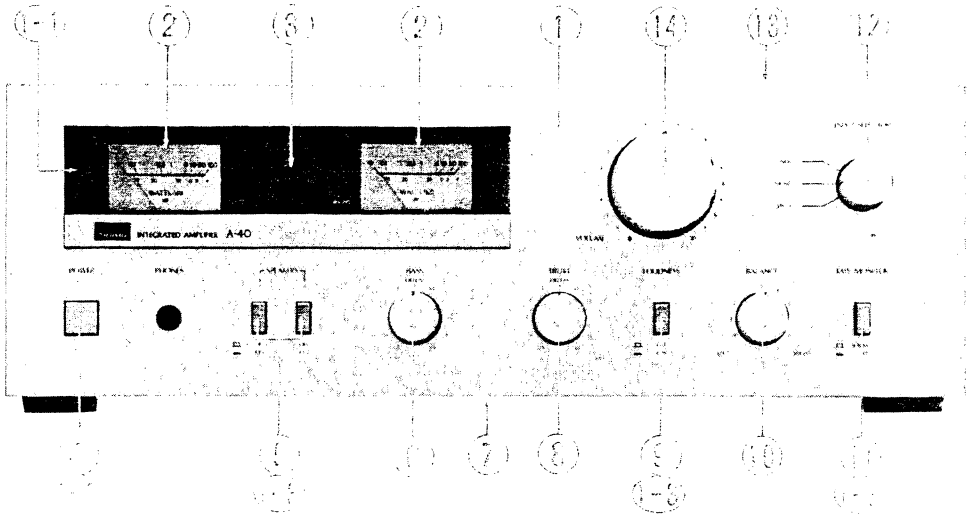
Note: As the stock number in the parts list on this service manual is indicated in 8 digit to differ from ordinary 7 digit, please be carefull when ordering parts.

• Abbreviations

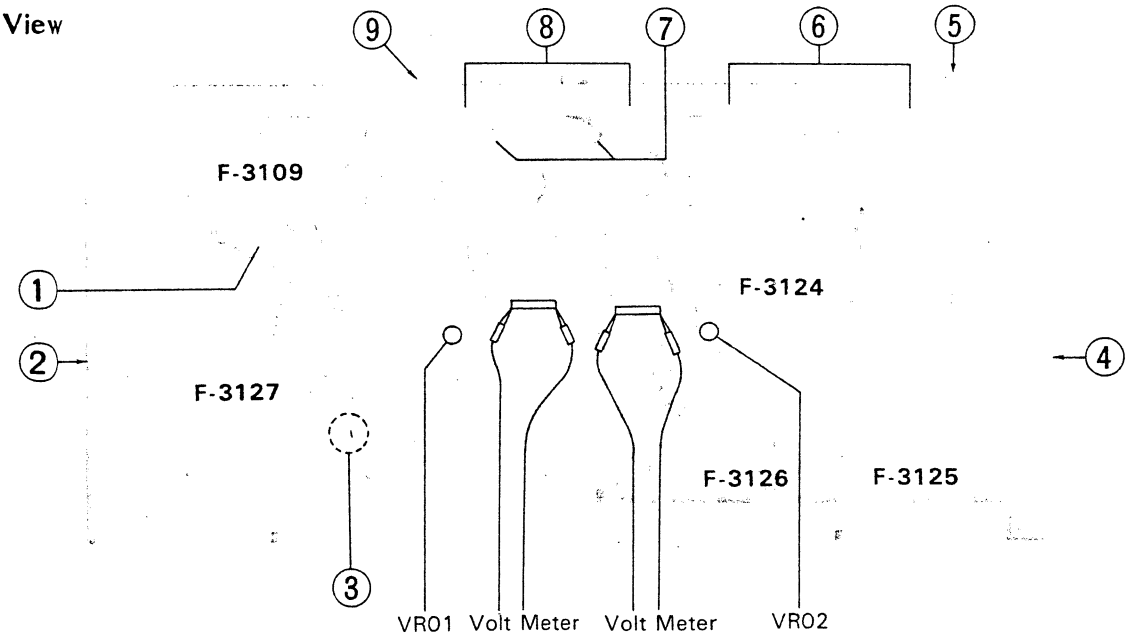
C.R.	Carbon Resistor	E.L.	Low Leak Electrolytic Capacitor
S.R.	Solid Resistor	E.B.	Bi-Polar Electrolytic Capacitor
Ce.R.	Cement Resistor	E.BL.	Low Leak Bi-Polar Electrolytic Capacitor
M.R.	Metal Film Resistor		
F.R.	Fusing Resistor	Ta.C.	Tantalum Capacitor
N.I.R.	Non-Inflammable Resistor	F.C.	Film Capacitor
C.C.	Ceramic Capacitor	M.P.	Metalized Paper Capacitor
C.T.	Ceramic Capacitor, Temperature Compensation	P.C.	Polystyrene Capacitor
		G.C.	Gimrnic Capacitor
E.C.	Electrolytic Capacitor		

5. OTHER PARTS

5-1. Front View



5-2. Top View



Parts List <Front View>

No	Parts No.	Stock No.	Description
1		70086200	Front Panel Ass'y (Silver)
		70087100	Front Panel Ass'y (Black)
1-1		54465500	Meter Glass
1-2		59560800	Knob Guide, power switch (Silver)
		59560900	Knob Guide, power switch (Black)
1-3		53967800	Knob Guide (Silver)
		53967700	Knob Guide (Black)
2		43014100	Power Meter
3		73060500	Meter Flame Ass'y
4		53195000	Knob, power switch (Silver)
		53196500	Knob, power switch (Black)
		11317900	Power Switch
5	S 603	53194900	Push Knob, speakers (Silver)
		53194800	Push Knob, speakers (Black)
		11322300	Speaker Switch
6		53195800	Knob, bass control (Silver)
		53196300	Knob, bass control (Black)
		10156200	Volume 100kΩ x 2, bass control
7		50664200	Bottom Board
8		53195800	Knob, treble control (Silver)
		53196300	Knob, treble control (Black)
		10156200	Volume 100kΩ x 2, treble control
9		53194900	Push Knob, loudness (Silver)
		53194800	Push Knob, loudness (Black)
		11322400	Push Switch, loudness
10		53195800	Knob, balance, volume (Silver)
		53196300	Knob, balance volume (Black)
		10054600	Volume 250kΩ (B), balance
11		53195800	Push Knob, tape monitor (Silver)
		53196300	Push Knob, tape monitor (Black)
		11907800	Tape Monitor Switch
12		53195800	Knob, input selector (Silver)
		53196300	Knob, input selector (Black)
		11907800	Input Selector Switch
13		57272400	Bonnet
14		53195500	Knob, volume (Silver)
		53196400	Knob, volume (Black)
		10155700	Volume 150kΩ (B) x 2

Parts List <Top View>

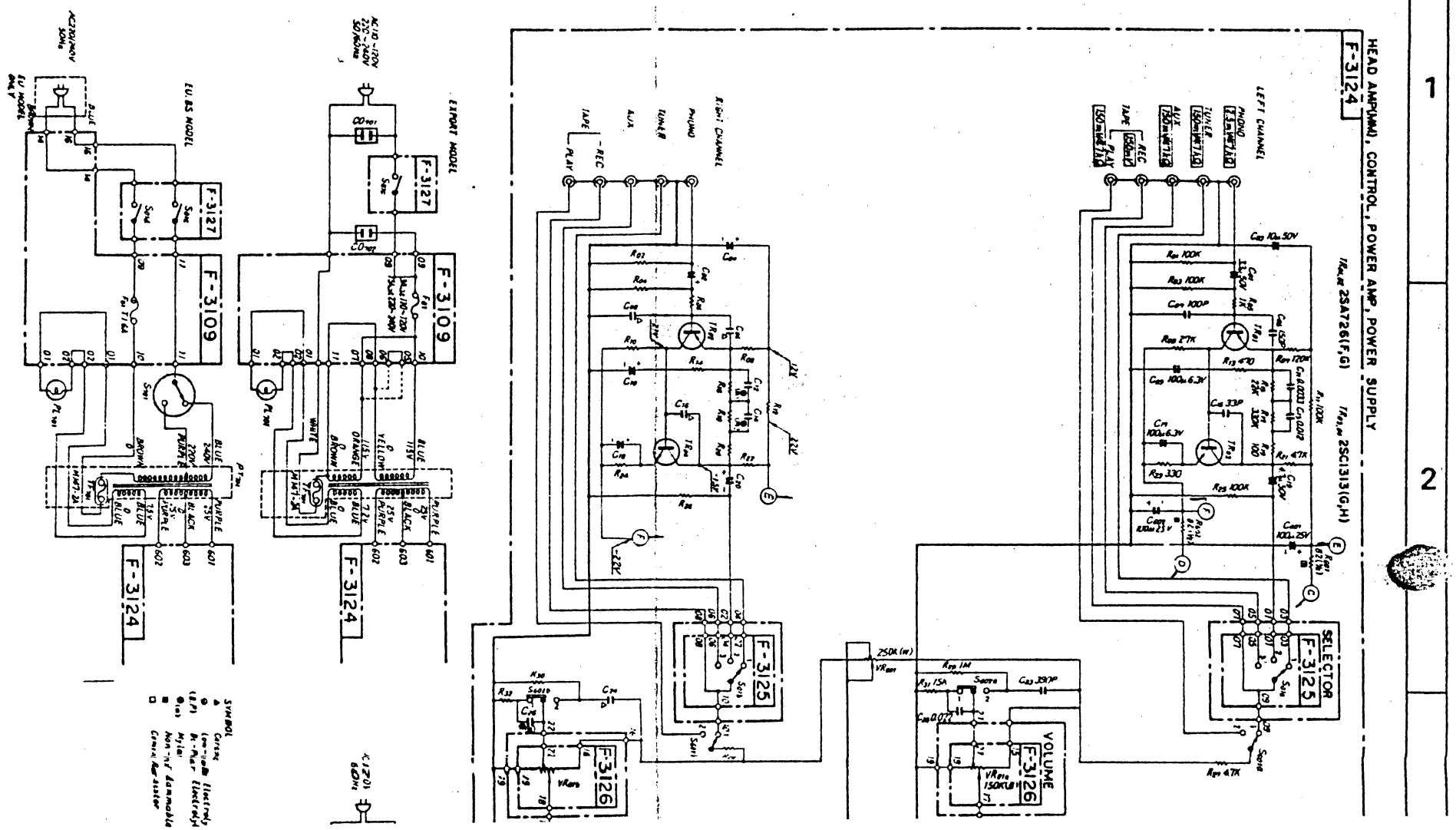
No.	Parts No.	Stock No.	Description
1	PT 701	40032100	Power Transformer
2		54578000	Side Panel (L)
3	PL 701	04007100	Lamp, 8V 300 mA
4		54578100	Side Panel (R)
5		22301500	Ground Terminal
6		22007100	Input Terminal (Tape)
		22007200	Input Terminal (Phono)
7		24501100	AC Outlet
8		22902400	Output Terminal (A system)
		22902500	Output Termianl (B system)
9		38004700	AC Cord
		39106000	Strain Relief

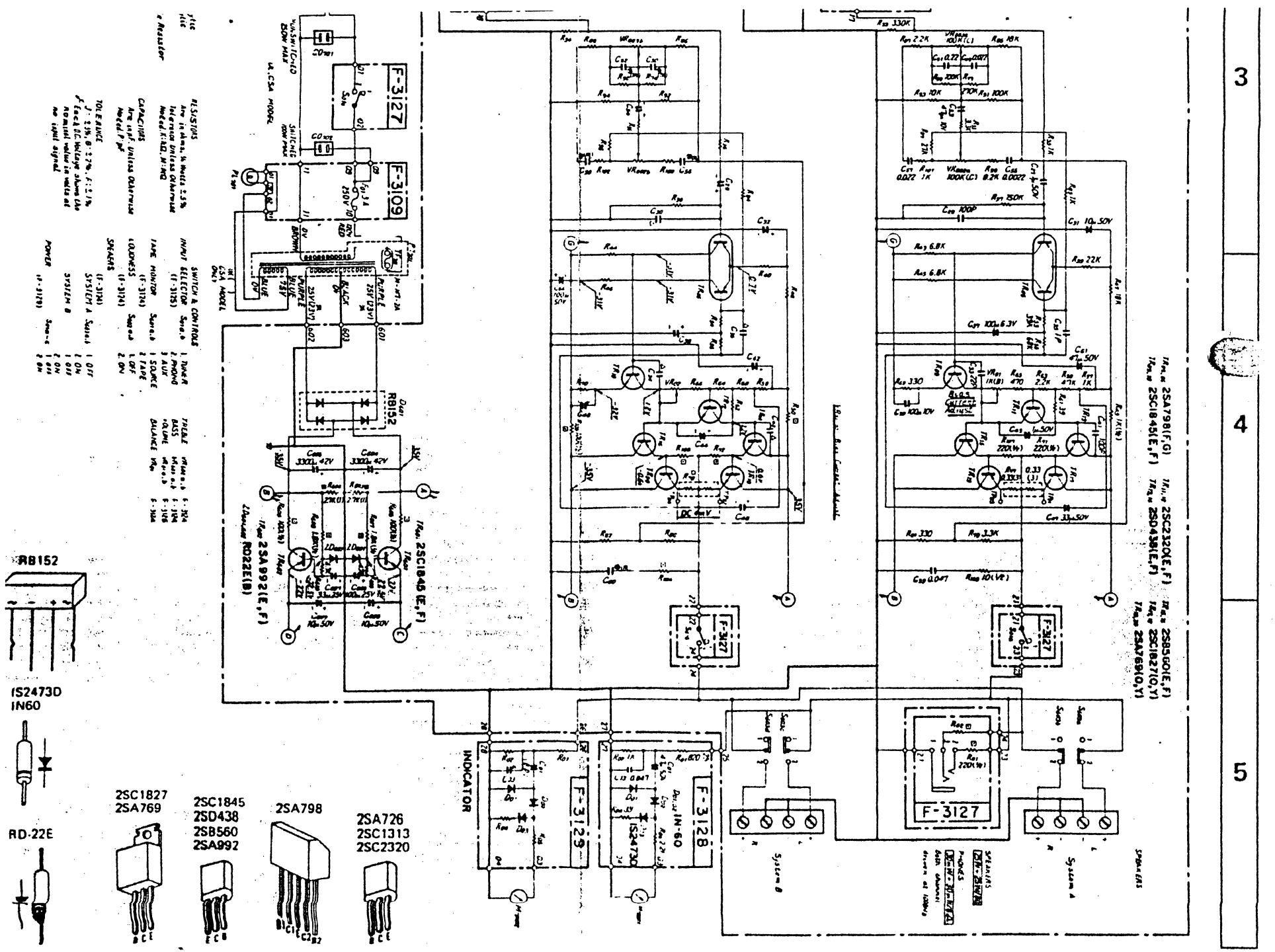
Note:

Since there are black & silver models in A-40, please pay attention when ordering parts.

- Design and specifications subject to change without notice for improvement.
- La présentation et les spécifications sont susceptibles d'être modifiées sans préavis par suites d'améliorations éventuelles.
- Änderungen, die dem technischen Fortschritt dienen, bleiben vorbehalten.

4. SCHEMATIC DIAGRAM




F-3127
F-3109
F-3129
F-3128
INDICATOR
RB152
IS2473D
IN60
RD-22E
2SC1827
2SA769
2SC1845
2SD438
2SB560
2SA992
2SA798
2SA726
2SC1313
2SC2320

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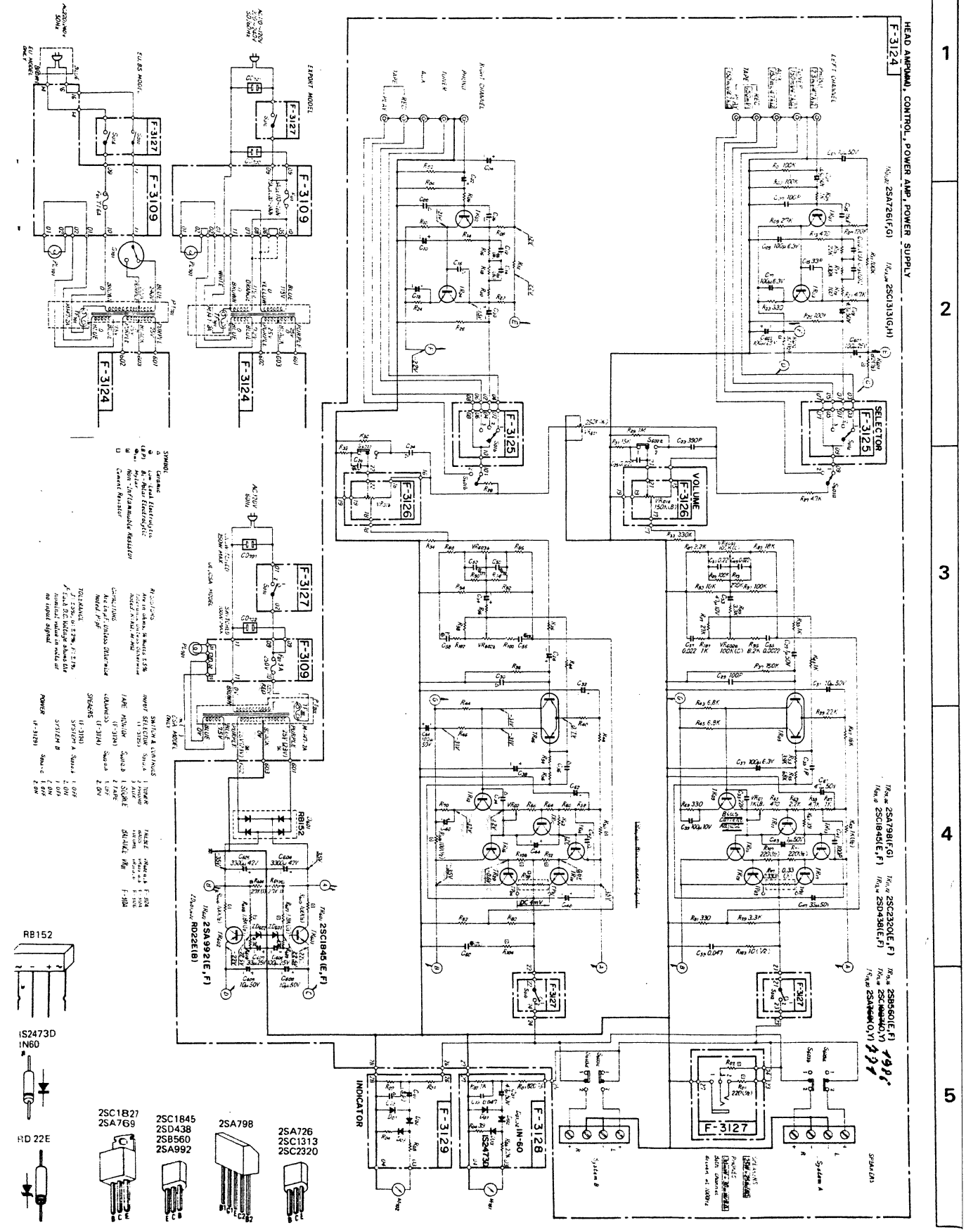
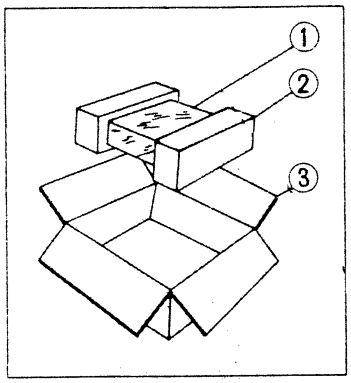
A	B	C	D

4. SCHEMATIC DIAGRAM



5. PACKING LIST

No.	Stock No.	Description
1	91263800	Vinyl Cover
2	90284000	Styrofoam Packing
3	90562900	Carton Case (Black)
	90561600	Carton Case (Silver)



7. ACCESSORY PARTS LIST

Stock No.	Description
92055300	Operating Instructions

SANSUI ELECTRONICS CORPORATION: 1250 Valley Brook Ave. Lyndhurst, N.J. 07071 U.S.A.
333 West Alondra Blvd. Gardena, California 90247 U.S.A.
3036 Koapaka St. Honolulu, Hawaii 96819 U.S.A.
SANSUI AUDIO EUROPE N.V.: North Trade Bldg (9th floor) Noorderlaan 133-Bus 1,2030 Antwerp, Belgium
SNASUI AUDIO EUROPE S.A.: Arabella center, 6 Frankfurt AM Main, Lyoner Strasse 44-48, West Germany
SANSUI ELECTRIC COMPANY LTD.: 14-1, Izumi 2-chome, Suginamiku, Tokyo 168 Japan PHONE: (03) 323-1111/TELEX: 232-0 76